

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. - 9. (Cancelled)

10. (Withdrawn) A display apparatus which makes one pixel displayable in four colors, that is, three primary colors and a white color, and inputs and displays chrominance signals corresponding to a mixing ratio of said four colors, comprising:

color correction instrument which performs a first color correction of increasing the saturation of said chrominance signals and a second color correction of increasing a white color component of said chrominance signals, when a predetermined color component exists in said chrominance signals corresponding to said pixel;

selection instrument which switches temporally a first chrominance signal obtained by said first color correction, and a second chrominance signal obtained by said second color correction, and selects either; and

display instrument which displays the chrominance signal, which is selected, in said pixel.

11. (Previously Presented) A display apparatus including pixels, each pixel configured to display four colors including three primary colors and a white color, the display apparatus receiving chrominance signals corresponding to a mixing ratio of said four colors and displaying said chrominance signals to include said four colors, comprising:

a color correction instrument which applies, to at least one of the pixels, each of a) a first color correction of increasing saturation of at least one of said chrominance signals by decreasing a value of the at least one of said chrominance signals to form a first corrected chrominance signal and b) a second color correction of increasing the white color component of the at least one of said chrominance signals by increasing the value of the at least one of said chrominance signals to form a second corrected

chrominance signal, when a predetermined color component is detected in said chrominance signals corresponding to said at least one pixel;

a height generation instrument which generates, when a region of adjacent pixels having said predetermined color component is detected, a saturation height difference for the pixels in said region by assigning each of said first corrected chrominance signal and said second corrected chrominance signal to the pixels of said region according to a predetermined assignment pattern, the predetermined assignment pattern alternating said first and second corrected chrominance signals over one or more of said pixels; and

a display instrument which displays the pixels of said region using said generated saturation height difference.

12. (Withdrawn) The display apparatus according to claim 10, wherein said predetermined color is yellow, magenta, or cyan.

13. (Previously Presented) The display apparatus according to claim 11, wherein said predetermined color component is yellow, magenta, or cyan.

14. (Withdrawn) The display apparatus according to claim 10, wherein said three primary colors are red, green, and blue.

15. (Previously Presented) The display apparatus according to claim 11, wherein said three primary colors are red, green, and blue.

16. (Withdrawn) The display apparatus according to claim 10, wherein said chrominance signals are RGB signals.

17. (Withdrawn) The display apparatus according to claim 16, wherein,

when said predetermined color is yellow, said color correction instrument performs said first color correction by decreasing a value of a B signal of said chrominance signals and performs said second color correction by increasing a B signal of said chrominance signals, when a yellow color component exists in said chrominance signals corresponding to said pixel.

18. (Previously Presented) The display apparatus according to claim 11, wherein said chrominance signals are RGB signals.

19. (Previously Presented) The display apparatus according to claim 18, wherein,

when said predetermined color component is yellow, said color correction instrument performs said first color correction by decreasing a value of a B signal of said chrominance signals and performs said second color correction by increasing the B signal of said chrominance signals, when a yellow color component exists in said chrominance signals corresponding to said pixel.

20. (Withdrawn) The display apparatus according to claim 10 wherein said selection instrument switches temporally and selects either said first chrominance signal or said second chrominance signal using a signal of determining the timing when said display instrument performs display in said pixel.

21. (Previously Presented) The display apparatus according to claim 11, wherein said height generation instrument performs the assignment of said first corrected chrominance signal and said second corrected chrominance signal using a signal of determining timing when said display instrument performs display in said respective pixel.

22. (Withdrawn) A display method of making one pixel displayable in four colors, that is, three primary colors and a white color, and inputting and displaying chrominance signals corresponding to a mixing ratio of said four colors, comprising:

a color correction step of performing a first color correction of increasing the saturation of said chrominance signals and a second color correction of increasing a white color component of said chrominance signals, when a predetermined color component exists in said chrominance signals corresponding to said pixel;

a selection step of switching temporally a first chrominance signal obtained by said first color correction, and a second chrominance signal obtained by said second color correction, and selecting either; and

a display step of displaying the chrominance signal, which is selected, in said pixel.

23. (Previously Presented) A display method of displaying, for each pixel, four colors including three primary colors and a white color, receiving chrominance signals corresponding to a mixing ratio of said four colors and displaying said chrominance signals to include said four colors, comprising:

a color correction step of applying, to at least one of the pixels, each of a) a first color correction of increasing saturation of at least one of said chrominance signals by decreasing a value of the at least one of said chrominance signals to form a first corrected chrominance signal and b) a second color correction of increasing the white color component of at least one of said chrominance signals by increasing the value of the at least one of said chrominance signals to form a second corrected chrominance signal, when a predetermined color component is detected in said chrominance signals corresponding to said at least one pixel;

a height generation step of generating, when a region of adjacent pixels having said predetermined color component is detected, a saturation height difference for the pixels in said region by assigning each of said first corrected chrominance signal and said second corrected chrominance signal to the pixels of said region according to a predetermined assignment pattern, the predetermined assignment pattern alternating said first and second corrected chrominance signals over one or more said pixels; and

a display step of displaying the pixels of said region on a display instrument using said generated saturation height difference .

24. (Cancelled)

25. (Previously Presented) A computer readable medium including computer program instructions which are configured to cause a computer to function as:

a color correction instrument which applies, to at least one pixel, each of a) a first color correction of increasing saturation of at least one chrominance signal by

decreasing a value of the at least one chrominance signal to form a first corrected chrominance signal and b) a second color correction of increasing a white color component of said at least one chrominance signal by increasing the value of the at least one chrominance signal to form a second corrected chrominance signal, when a predetermined color component is detected in said chrominance signal corresponding to said at least one pixel; and

a height generation instrument which generates, when a region of adjacent pixels having said predetermined color component is detected, a saturation height difference for the pixels in said region by assigning each of said first corrected chrominance signal and said second corrected chrominance signal to the pixels of said region according to a predetermined assignment pattern, the predetermined assignment pattern alternating said first and second corrected chrominance signals over one or more of said pixels in a display apparatus, wherein

each pixel of said display apparatus is configured to display four colors including three primary colors and said white color component, the display apparatus receiving and displaying said chrominance signal corresponding to a mixing ratio of said four colors, and

said display apparatus comprises said color correction instrument, and a display instrument which displays the chrominance signal, which is selected by said color correction instrument, in said pixel.

26. (Previously Presented) A display apparatus including pixels, each pixel configured to display four colors including three primary colors and a white color, the display apparatus receiving and displaying chrominance signals corresponding to a mixing ratio of said four colors, comprising:

a color detection instrument which detects whether a predetermined color component is included in each chrominance signal corresponding to each pixel in a predetermined region;

a color correction instrument which applies, to at least one of the pixels, each of a) a first color correction of increasing the saturation of at least one of said chrominance signals by decreasing a value of the at least one of said chrominance

signals to form a first corrected chrominance signal and b) a second color correction of increasing the white color component of the at least one of said chrominance signals by increasing the value of the at least one of said chrominance signals to form a second corrected chrominance signal,

a control instrument which performs control of a color correction of the at least one of said chrominance signals based on said detected predetermined color component so that each of said first corrected chrominance signal and said second corrected chrominance signal are alternately displayed in a predetermined size of pixel units which are horizontally and/or vertically adjacent, over said predetermined region; and

a display instrument which displays, for each pixel, said first corrected chrominance signal, said second corrected chrominance signal, or a chrominance signal not provided with said color correction responsive to said control instrument.

27. (Previously Presented) The display apparatus according to claim 26 wherein said predetermined size of pixel units is two pixel units.

28. (Previously Presented) The display apparatus according to claim 26, wherein when said control instrument performs the control so that each of said first corrected chrominance signal and said second corrected chrominance signal are alternately displayed in said predetermined size of pixel units, which are horizontally adjacent, over said predetermined region,

said control instrument switches and selects said first corrected chrominance signal and said second corrected chrominance signal in every one of a predetermined plurality of dot clock signals for determining display timing of every pixel in said predetermined region.

29. (Previously Presented) The display apparatus according to claim 26, wherein when said control instrument performs the control so that each of said first corrected chrominance signal and said second corrected chrominance signal are alternately displayed in said predetermined size of pixel units, which are vertically adjacent, over said predetermined region,

said control instrument switches and selects said first corrected chrominance signal and said second corrected chrominance signal for every one of a predetermined plurality of horizontal periods in said predetermined region.

30. (Previously Presented) The display apparatus according to claim 26 wherein said control instrument performs the control so that said first corrected chrominance signal and said second corrected chrominance signal are temporally alternately displayed in said corresponding pixel of said predetermined region .

31. (Previously Presented) The display apparatus according to claim 26, wherein said control instrument performs the control so that a chrominance signal which does not include said predetermined color component is displayed without performing said color correction, and

performs the control so that each of said first corrected signal and said second corrected signal are alternately displayed, where it is assumed that all of the chrominance signals displayed in the corresponding pixel of said predetermined region include said predetermined color component.

32. (Previously Presented) The display apparatus according to claim 26, wherein said predetermined color component is yellow, magenta, or cyan.

33. (Previously Presented) The display apparatus according to claim 26, wherein said three primary colors are red, green, and blue.

34. (Previously Presented) The display apparatus according to claim 26, wherein said chrominance signals are RGB signals.

35. (Previously Presented) The display apparatus according to claim 26, wherein, when said predetermined color component is yellow, said color correction instrument performs said first color correction by decreasing a value of a B signal of said chrominance signal and performs said second color correction by increasing the value of the B signal of said chrominance signal, when a yellow color component exists in said chrominance signals corresponding to said pixel.

36. (Currently Amended) A display method using a display apparatus including pixels, each pixel configured to ~~display four~~ display four colors including three primary colors and a white color, the display apparatus receiving and displaying chrominance signals corresponding to a mixing ratio of said four colors, comprising:

a color detection step of detecting whether a predetermined color component is included in each chrominance signal corresponding to each pixel in a predetermined region;

a color correction step of applying, to at least one of the pixels, each of a) a first color correction of increasing the saturation of at least one of said chrominance signals by decreasing a value of the at least one of said chrominance signals to form a first corrected chrominance signal and b) a second color correction of increasing the white color component of the at least one of said chrominance signals by increasing the value of the at least one of said chrominance signals to form a second corrected chrominance signal,

a control step of performing control of a color correction of the at least one of said chrominance signals based on said detected predetermined color component so that each of said first corrected chrominance signal and said corrected second chrominance signal are alternately displayed in a predetermined size of pixel units, which are horizontally and/or vertically adjacent, over said predetermined region; and

a display step of displaying on a display instrument, for each pixel, said first corrected chrominance signal, said second corrected chrominance signal, or a chrominance signal not provided with said color correction responsive to said control step.

37. (Currently Amended) A computer readable medium including computer program instructions which are configured to cause a computer to perform:

a color detection step of detecting whether a predetermined color component is included in each chrominance signal corresponding to each pixel in a predetermined region;

a color correction step of applying, to at least one of the pixels, each of
a) a first color correction of increasing the saturation of at least one chrominance signal by decreasing a value of the at least one chrominance signal to form a first corrected chrominance signal and b) a second color correction of increasing a white color component of the at least one chrominance signal by increasing the value of the at least one chrominance signal to form a second corrected chrominance signal; and

a control step of performing control of a color correction of the at least one chrominance signal based on said detected predetermined color component so that each of said first corrected chrominance signal and said second corrected chrominance signal are alternately displayed in a predetermined size of pixel units, which are horizontally and/or vertically adjacent, ~~oversaid-over said~~ over said predetermined region, of a display method wherein

each pixel of said display method is configured to display four colors including three primary colors and the white color component, and receives and displays said chrominance signal corresponding to a mixing ratio of said four colors, and

said display method comprises said color correction step, said control step and a display step.

38. (Withdrawn) A display apparatus which makes one pixel displayable in four colors, that is, three primary colors and a white color, and inputs and displays chrominance signals corresponding to a mixing ratio of said four colors, comprising:

color detection instrument which detects whether a predetermined color component is included in each chrominance signal corresponding to each pixel in a predetermined region;

color correction instrument which performs a first color correction of increasing the saturation of said chrominance signals and creating a first chrominance signal, and a second color correction of increasing a white color component of said chrominance signals and creating a second chrominance signal;

judgment instrument which judges whether a plurality of chrominance signals displayed in a pixel of said predetermined region fulfills a predetermined condition;

control instrument which performs the color correction of chrominance signals including said predetermined color component by said color correction instrument when not fulfilling said predetermined condition; and

display instrument which displays said first chrominance signal, said second chrominance signal, or a chrominance signal which is not given said color correction, in a pixel of said predetermined region on the basis of said control instrument.

39. (Withdrawn) The display apparatus according to claim 38, wherein said predetermined condition is a condition that chrominance signals including, said predetermined color component, are not displayed in two or more adjoining pixels spatially.

40. (Withdrawn) The display apparatus according to claim 38, wherein said predetermined condition is a condition that when a chrominance signal which does not include said color component is displayed without performing said color correction, and about the chrominance signals including said color component, said first chrominance signal and said second chrominance signal are displayed in turn spatially in a state that assumes that all the chrominance signals displayed in a pixel of said predetermined region include the predetermined color component and, either of an area where said first chrominance signal is displayed, and an area where said second chrominance signal is displayed is larger by 5% or more than the other.

41. (Withdrawn) The display apparatus according to claim 38, wherein said predetermined condition is a condition that, when a chrominance signal which does not include said color component is displayed without performing said color correction, and concerning a chrominance signals which include said color component, said first chrominance signal and said second chrominance signal are displayed in turn spatially in a state that assumes that all the chrominance signals displayed in a pixel of said predetermined region include the predetermined color component, either said first chrominance signal or said second chrominance signal is displayed except a chrominance signal which is not given said color correction.

42. (Withdrawn) The display apparatus according to claim 39, wherein, when said predetermined condition is not fulfilled, said control instrument performs

control so that said first chrominance signal and said second chrominance signal may be displayed in turn spatially in every pixel unit or in every plural pixel units in said predetermined region.

43. (Withdrawn) The display apparatus according to claim 40, wherein, when said predetermined condition is not fulfilled, said control instrument performs control so that said first chrominance signal and said second chrominance signal may be displayed in turn spatially in every pixel unit in said predetermined region in a state that assumes that all the chrominance signals displayed in a pixel of said predetermined region include the predetermined color component.

44. (Withdrawn) The display apparatus according to claim 41, wherein, when said predetermined condition is not fulfilled, said control instrument performs control so that said first chrominance signal and said second chrominance signal may be displayed in turn spatially in every pixel unit in said predetermined region in a state that assumes that all the chrominance signals displayed in a pixel of said predetermined region include the predetermined color component.

45. (Withdrawn) The display apparatus according to claim 43, wherein, when said predetermined condition is fulfilled, said control instrument performs control so that concerning a chrominance signal which does not include said color component, said control instrument does not perform said color correction, and concerning the chrominance signals which include said color component, said first chrominance signal and said second chrominance signal may be displayed in turn spatially in every plural pixel units in said predetermined region in a state that assumes that all the chrominance signals displayed in a pixel of said predetermined region include the predetermined color component.

46. (Withdrawn) The display apparatus according to claim 44, wherein, when said predetermined condition is fulfilled, said control instrument performs control so that concerning a chrominance signal which does not include said color component, said control instrument does not perform said color correction, and concerning the chrominance signals which include said color component, said first chrominance signal and said second chrominance signal may be displayed in turn spatially in every plural pixel units in said predetermined region in a state that assumes that all the

chrominance signals displayed in a pixel of said predetermined region include the predetermined color component.

47. (Withdrawn) The display apparatus according to claim 42, wherein said control instrument has switching signal generating instrument which generates such a switching signal that said first chrominance signal and said second chrominance signal may be displayed in turn in every pixel unit or in every plural pixel units, and

wherein performing control so as to be displayed in turn spatially is selecting said first chrominance signal and said second chrominance signal in turn on the basis of said switching signal.

48. (Withdrawn) The display apparatus according to claim 43, wherein the control instrument has switching signal generating instrument which generates such a switching signal that said first chrominance signal and said second chrominance signal may be displayed in turn in every pixel unit, and

wherein performing control so as to be displayed in turn spatially is selecting said first chrominance signal and said second chrominance signal in turn on the basis of said switching signal, in a state that assumes that all the chrominance signals displayed in a pixel of said predetermined region include the predetermined color component.

49. (Withdrawn) The display apparatus according to claim 44, wherein the control instrument has switching signal generating instrument which generates such a switching signal that said first chrominance signal and said second chrominance signal may be displayed in turn in every pixel unit, and

wherein performing control so as to be displayed in turn spatially is selecting said first chrominance signal and said second chrominance signal in turn on the basis of said switching signal, in a state that assumes that all the chrominance signals displayed in a pixel of said predetermined region include the predetermined color component.

50. (Withdrawn) The display apparatus according to claim 45, wherein said control instrument has:

first switching signal generating instrument which generates a first switching signal so that said first chrominance signal and said second chrominance signal may be displayed in turn in every pixel unit in a pixel of a predetermined region;

second switching signal generating instrument which generates a second switching signal so that said first chrominance signal and said second chrominance signal may be displayed in turn in every plural pixel units in a pixel of a predetermined region; and

switching signal selection instrument which selects said first switching signal when said predetermined condition is not fulfilled, and selects said second switching signal when said predetermined condition is fulfilled, and

wherein performing control so as to be displayed in turn spatially is selecting said first chrominance signal and said second chrominance signal in turn on the basis of said first switching signal or said second switching signal, in a state that assumes that all the chrominance signals displayed in a pixel of said predetermined region include the predetermined color component.

51. (Withdrawn) The display apparatus according to claim 46, wherein said control instrument has:

first switching signal generating instrument which generates a first switching signal so that said first chrominance signal and said second chrominance signal may be displayed in turn in every pixel unit in a pixel of a predetermined region;

second switching signal generating instrument which generates a second switching signal so that said first chrominance signal and said second chrominance signal may be displayed in turn in every plural pixel units in a pixel of a predetermined region; and

switching signal selection instrument which selects said first switching signal when said predetermined condition is not fulfilled, and selects said second switching signal when said predetermined condition is fulfilled, and

wherein performing control so as to be displayed in turn spatially is selecting said first chrominance signal and said second chrominance signal in turn on the basis of said first switching signal or said second switching signal, in a state that assumes that all the chrominance signals displayed in a pixel of said predetermined region include the predetermined color component.

52. (Withdrawn) The display apparatus according to claim 47, wherein said switching signal is a signal using a signal which determines the timing of said display instrument which displays in said pixel.

53. (Withdrawn) The display apparatus according to claim 48, wherein said switching signal is a signal using a signal which determines the timing of said display instrument which displays in said pixel.

54. (Withdrawn) The display apparatus according to claim 49, wherein said switching signal is a signal using a signal which determines the timing of said display instrument which displays in said pixel.

55. (Withdrawn) The display apparatus according to claim 50, wherein said first switching signal and said second switching signal are signals using a signal which determines the timing of said display instrument which displays in said pixel.

56. (Withdrawn) The display apparatus according to claim 51, wherein said first switching signal and said second switching signal are signals using a signal which determines the timing of said display instrument which displays in said pixel.

57. (Withdrawn) The display apparatus according to claim 38, wherein said control instrument performs control so that said first chrominance signal and said second chrominance signal are displayed in a pixel of said predetermined region in turn temporally.

58. (Withdrawn) The display apparatus according to claim 38, wherein the color around said predetermined region is white.

59. (Withdrawn) The display apparatus according to claim 38, wherein said predetermined color component is yellow, magenta, or cyan.

60. (Withdrawn) The display apparatus according to claim 38, wherein said three primary colors are red, green, and blue.

61. (Withdrawn) The e display apparatus according to claim 38, wherein said chrominance signals are RGB signals.

62. (Withdrawn) The display apparatus according to claim 61, wherein said predetermined color component is yellow; and

wherein said color correction instrument performs said first color correction by decreasing a value of a B signal of said chrominance signals, and performs said second color correction by increasing a value of the B signal of said chrominance signals.

63. (Withdrawn) A display method using a display apparatus which makes one pixel displayable in four colors, that is, three primary colors and a white color, and inputs and displays chrominance signals corresponding to a mixing ratio of said four colors, comprising:

a color detection step of detecting whether a predetermined color component is included in each chrominance signal corresponding to each pixel in a predetermined region;

a color correction step of performing a first color correction of increasing the saturation of said chrominance signals and creating a first chrominance signal, and a second color correction of increasing a white color component of said chrominance signals and creating a second chrominance signal;

a judgment step of judging whether a plurality of chrominance signals displayed in a pixel of said predetermined region fulfill a predetermined condition;

a control step of performing control so as to perform the color correction of chrominance signals including said predetermined color component when not fulfilling said predetermined condition; and

a display step of displaying said first chrominance signal, said second chrominance signal, or a chrominance signal which is not given said color correction, in a pixel of said predetermined region on the basis of said control.

64. (Cancelled)

65. (Withdrawn) A display apparatus which makes one pixel displayable in four colors, that is, three primary colors and a white color, and inputs and displays chrominance signals corresponding to a mixing ratio of said four colors, comprising:

color detection instrument which detects whether a predetermined color component is included in each chrominance signal corresponding to each pixel in a predetermined region;

judgment instrument which judges whether a plurality of chrominance signals displayed in a pixel of said predetermined region fulfill a predetermined condition;

color correction instrument which performs the first color correction of increasing the saturation of said predetermined chrominance component of said chrominance signals and creating a first chrominance signal, and the second color correction of increasing a white color component of said chrominance signals and creating a second chrominance signal;

switching signal generating instrument which generates such a switching signal that said first chrominance signal and said second chrominance signal may be displayed in turn in every one or in plural pixel units, in a state that assumes that all the chrominance signals displayed on a pixel of said predetermined region include said predetermined color component;

first selection instrument which selects said first chrominance signal or said second chrominance signal in turn on the basis of said switching signal, in a state that assumes that all the chrominance signals displayed on a pixel of said predetermined region include the predetermined color component;

second selection instrument which selects said first chrominance signal or said second chrominance signal when said predetermined color component is included and said predetermined condition is not fulfilled, and otherwise selects a chrominance signal which is not given said color correction; and

display instrument which displays said first chrominance signal, said second chrominance signal, or a chrominance signal not given said color correction, which is selected by said first selection instrument and said second selection instrument, in a pixel of said predetermined region.

66. (Withdrawn) A display apparatus which makes one pixel displayable in four colors, that is, three primary colors and a white color, and inputs and displays chrominance signals corresponding to a mixing ratio of said four colors, comprising:

color detection instrument which detects whether a predetermined color component is included in each chrominance signal corresponding to each pixel in a predetermined region;

judgment instrument which judges whether a plurality of chrominance signals displayed in a pixel of said predetermined region fulfill a predetermined condition;

color correction instrument which performs a first color correction of increasing the saturation of said predetermined chrominance component of said chrominance signals and creating a first chrominance signal, and a second color correction of increasing a white color component of said chrominance signals and creating a second chrominance signal;

first switching signal generating instrument which generates a first switching signal so that said first chrominance signal and said second chrominance signal may be displayed in turn in every pixel unit, in a state that assumes that all the chrominance signals displayed on a pixel of said predetermined region include said predetermined color component;

second switching signal generating instrument which generates a second switching signal so that said first chrominance signal and said second chrominance signal may be displayed in turn in every plural pixel units, in a state that assumes that all the chrominance signals displayed on a pixel of said predetermined region include said predetermined color component;

switching signal selection instrument which selects said first switching signal when said predetermined condition is not fulfilled, and selects said second switching signal when said predetermined condition is fulfilled;

first selection instrument which selects said first chrominance signal or said second chrominance signal on the basis of said first switching signal or said second switching signal which is selected by said switching signal selection instrument;

second selection instrument which selects said first chrominance signal or said second chrominance signal, which is selected by said first selection instrument, when said predetermined color component is included, and selects a chrominance signal, which is not given said color correction, when said predetermined color component is not included; and

display instrument which displays said first chrominance signal, said second chrominance signal, or a chrominance signal not given said color correction, which is selected by said first selection instrument and said second selection instrument, in a pixel of the predetermined region.

67. (New) The display apparatus according to claim 11, wherein said color correction instrument separately applies each of said first color correction and said second color correction to said respective at least one of the pixels.